

Corrispondenze Comparable standards

| SIAU | DIN | W.N. | AFNOR | BS | AISI/SAE |
|------|--------------|----------|---------|----------|----------|
| KNAS | (35NiCrMo16) | (1.2766) | 35NCD16 | (835M30) | - |

Composizione Chemical analysis

| C | Mn | Si | Cr | Ni | Mo | P e S |
|---------|---------|---------|-----------|-----------|---------|--------|
| .31±.38 | .30±.60 | .15±.40 | 1.60±2.00 | 3.70±4.20 | .25±.45 | ≤ .035 |

Temperature per la lavorazione a caldo ed il trattamento termico Hot work and heat treatment temperatures

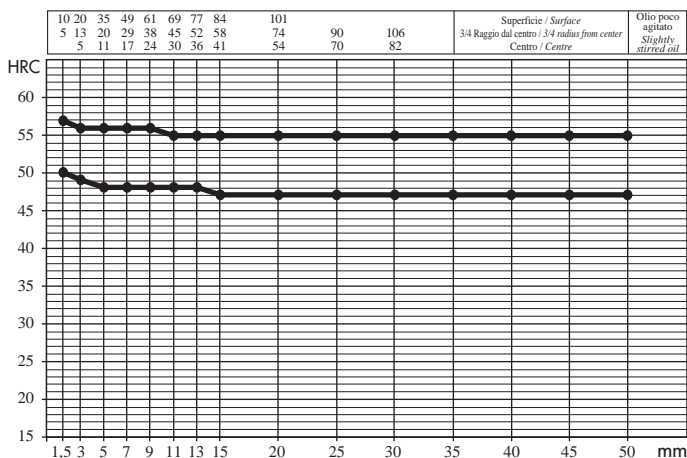
| Punti critici Critical points | Fucinatura Forging | Normalizzazione Normalization | Ricottura subcritica Subcritical annealing | Ricottura isotermica Isothermal annealing | Tempra Hardening | Rinvenimento Tempering |
|----------------------------------|-----------------------|----------------------------------|---|--|---------------------|---------------------------|
| Ac1 700 | | | | | 830±850 | 550±600 |
| Ac3 750 | 1100±900 | 830±860 | 640±670 | - | aria / air | |
| Ms 240 | | | | | olio / oil | 160±180 |

Caratteristiche meccaniche / Mechanical properties

| Stato Condition | Saggio Ø mm. Specimen Ø mm. | Re min. N/mm ² | Rm N/mm ² | A min. % | KCU min. J | Durezze HB allo stato HB hardness in the following conditions |
|--|--------------------------------|------------------------------|-------------------------|-------------|---------------|--|
| Bonificato Hardened and tempered | ≤ 16 | 1030 | 1230÷1420 | 9 | 20 | Ricotto lavorabile / Soft-annealed ≤ 275 |
| | ≤ 40 | 1030 | 1230÷1420 | 9 | 20 | |
| | ≤ 100 | 930 | 1130÷1320 | 10 | 25 | |
| | ≤ 160 | 880 | 1080÷1270 | 10 | 25 | |
| | ≤ 250 | 785 | 980÷1180 | 11 | 25 | |
| Temp. disteso / Hardened and stress relieved | 11 | 1275 | 1720÷1960 | 7 | 15 | |

Temprabilità Hardenability

| HRC / % Martensite | Diametro temprabile mm. / Hardenable diameter mm. |
|--------------------|---|
| 90% | 50% |
| olio / oil | acqua / water |
| - | - |

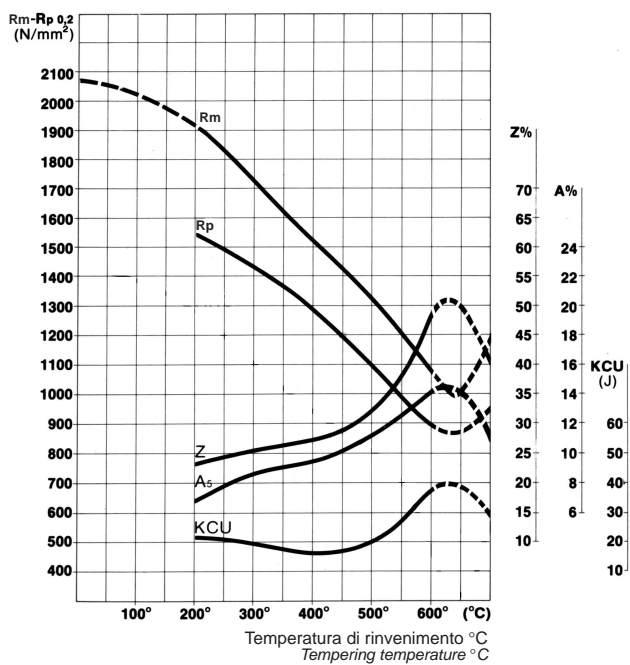


Temprabilità Jominy Jominy hardenability

| Distanza dall'estremità temprata Distance from quenched end | Durezza Rockwell Rockwell hardness | |
|--|---------------------------------------|---------|
| mm. | HRc min | HRc max |
| 1,5 | 50 | 57 |
| 3 | 49 | 56 |
| 5 | 48 | 56 |
| 7 | 48 | 56 |
| 9 | 48 | 56 |
| 11 | 48 | 55 |
| 13 | 48 | 55 |
| 15 | 47 | 55 |
| 20 | 47 | 55 |
| 25 | 47 | 55 |
| 30 | 47 | 55 |
| 35 | 47 | 55 |
| 40 | 47 | 55 |
| 45 | 47 | 55 |
| 50 | 47 | 55 |

34NiCrMo16

Diagramma di Rinvenimento Tempering curve



Trattamento: su Ø 10 mm
Treatment: on Ø 10 mm

Tempra: 850 °C olio
Hardening: 850 °C oil

Rinvenimento per 1 ora
Tempering for 1 hour